

THE ADVISOR

A Publication of the Rocky Flats Citizens Advisory Board

Spring 1997

Work to Begin on Mound Remediation This Spring

This spring, contractors at Rocky Flats will begin remediation work on one of the major groundwater contamination sources at the site. Ranked number four on the site's remediation projects priority list, the Mound is a former waste disposal area that was used from 1954-58 for the storage of waste drums containing uranium, beryllium, plutonium, hydraulic oil, and volatile organic chemicals. These drums originated from machining operations and the content was primarily lathe coolant. The coolant itself was a mixture of hydraulic oil and carbon tetrachloride. During machining operations, the coolant became contaminated with bits of uranium, beryllium and plutonium, as well as other cleaning solvents. An estimated 1,400 drums were placed in the area and covered by a "mound" of soil, hence the name of the site. (See the accompanying pictures).

In 1970, a remedial action took place at the Mound to remove the drums and soil contaminated with radioactive materials. After this remediation, the Mound took on its present appearance as a depression in the ground, rather than a mound of soil. During the time that the drums were at the Mound area, many of them leaked. The 1970 remedial action focused on removing the waste drums and residual radioactive soil contamination, but much of the volatile organic chemical contamination was left behind. Over time, the presence of these chemicals in the soil has led to groundwater contamination. The goal of this remediation project is to remove the source of contamination and improve the overall groundwater quality.



View of the Mound site as it appeared during the initial remediation effort in 1970.

During the upcoming remediation project, workers first will dig up the contaminated soil. Estimates for the amount of soil to be excavated range from 400 to 1,000 cubic yards. After excavation, the soil will be trucked to a storage area to await treatment.

In order to treat the soil and remove the volatile organic chemical contamination, remediation workers will use a thermal desorption process. This process involves a large oven that heats the soil and allows the chemicals to become volatile. The resulting gases are then condensed and collected as a liquid product. A similar treatment strategy has already proven successful at two other remediation sites, Ryan's Pit and the T3 and T4 trenches. After treatment, the soils will be tested to make certain that they meet state soil contamination guidelines. If the soils meet the guidelines, they will be returned to the Mound area and placed back into the hole from which they were dug. Once all the soil is returned, the area will be revegetated and the remediation will be complete.

(continued on Page 3)

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Rocky Flats Updates



DOE Makes Plutonium Storage Decisions

In January, DOE issued the Record of Decision for its Programmatic Environmental Impact Statement on the Storage and Disposition of Weapons-Usable Fissile Materials. The purpose of the study was to explore the societal and environmental impacts of alternatives for managing the plutonium and highly enriched uranium that is no longer needed by the United States for making nuclear weapons. Fourteen tons of plutonium still reside at Rocky Flats, so the decisions made in the environmental impact statement will greatly impact the site.

The inventory of plutonium at Rocky Flats is in a variety of forms. These forms include finished weapons parts, raw metal, and wastes. DOE has decided to send the finished weapons parts, or "pits" as they are called, to the Pantex facility in Texas. During the days of weapons production, Pantex was the final assembly point for the nuclear warhead. The Pantex site already stores the majority of stockpiled pits and will continue to receive more as the United States retires additional warheads in compliance with disarmament treaties with Russia. Transport of the pits from Rocky Flats is expected to begin soon and be complete within two years.

DOE plans to send the remainder of the Rocky Flats plutonium to the Savannah River Site in South Carolina. During weapons production days, the Savannah River Site was one of two sites where plutonium was separated from the fuel rods of nuclear reactors.

DOE must first complete an additional environmental impact statement and successfully maneuver the political roadblocks before Rocky Flats can begin shipping the plutonium. The current goal is to have all the material removed from Rocky Flats by the year 2004. The federal government and the State of Colorado have already reached an agreement that all plutonium must be gone from Rocky Flats by the year 2015.

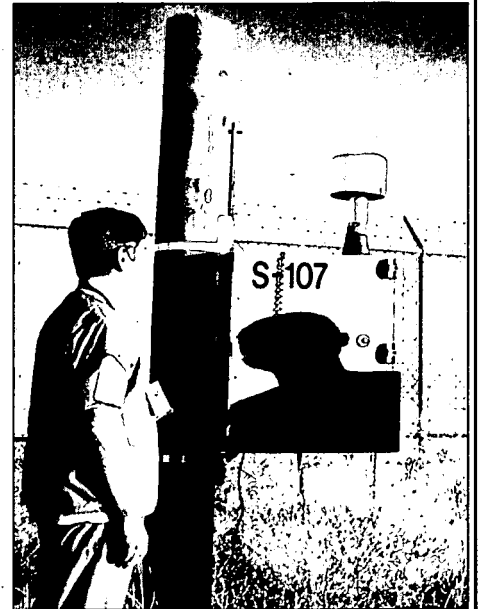
Ten Year Plan Update

Since the first draft of the Rocky Flats Ten Year Plan was submitted to DOE Headquarters last July, the site has continued to work on the next revision, which is to be submitted on February 28.

One of the major differences from the July 1996 draft will be an analysis of two funding scenarios. Whereas the first draft assumed constant funding at approximately \$650 million per year, this revision will look at the effects of funding levels of \$580 million and \$630 million per year, plus an additional \$30 million in Fiscal Year 1999 for privatization projects. Another change in this version of the Ten Year Plan is that the site, in conjunction with the Rocky Flats Local Impacts Initiative, has identified nine buildings that will be saved for conversion to private use, instead of being slated for demolition.

The Department of Energy Headquarters office will develop and release a national Ten Year Plan for a formal public comment period from March 31 through May 15. This will also be a time to comment on the individual Rocky Flats plan. DOE plans to convene a national stakeholder meeting at the end of May.

After hearing this public comment, Rocky Flats and the other sites will be asked to make any appropriate changes and submit one last revision of the plan to DOE Headquarters by August 15. CAB will continue to review the draft plans as they are released and will share any new information through future newsletters and other notices.



Air monitoring station at Rocky Flats.

CAB to Begin Review of Environmental Monitoring

This spring, CAB will begin a comprehensive review of the environmental monitoring program at and around the Rocky Flats site. Members of the community have long expressed a desire to gain a better understanding of the monitoring systems. To accomplish this project, CAB will employ the services of an independent contractor to develop a comprehensive description of the current monitoring systems. The information will be published in a user-friendly format available for the community.

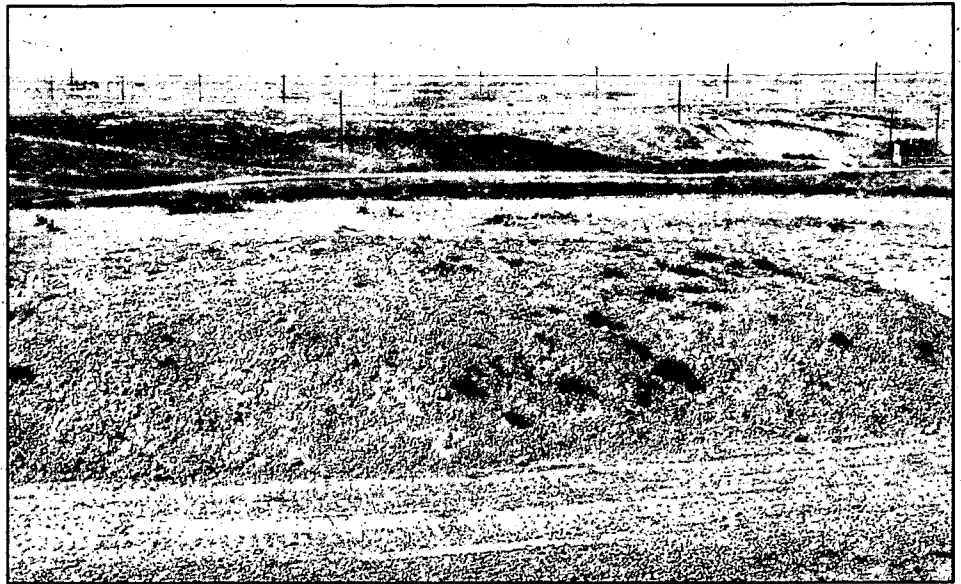
In the second phase of the project, the contractor will perform a critical analysis of the monitoring systems, using its own professional judgment and taking into consideration the needs and desires of the local community. Following the evaluation, the contractor will develop a set of recommendations on how the current monitoring systems might be changed or augmented.

CAB is excited about beginning this project and will provide further updates in future editions of *The Advisor*. Project completion is set for June 1997.

Mound Remediation (continued from Page 1)

To ensure safety during the excavation, transport, storage and treatment of the soils, air monitors will be used. These monitors will detect volatile organic compounds, particulates and radioactive materials. To help prevent dispersion of the soil, workers will use water to wet the soil, and all work will be stopped should any high winds arise. When the soil is placed in the storage area prior to treatment, concrete barriers and a tarp covering will be used as safeguards. A plastic lined ditch will be built around the storage area to divert any stormwater. The thermal treatment system will utilize a high-efficiency particulate air (HEPA) filter to minimize particulate emissions. When the remediation is complete, final radiological surveys of the excavation site, the treatment and storage areas, and the equipment will be performed. Workers will wear skin and respiratory protection equipment during the project.

Work will begin on the project in March with excavation, which is expected to last until April. Workers will



Taken in 1954, this picture shows how the Mound looked prior to the 1970 remediation.

continually sample the soil at the site to ensure that all the contaminated soil is removed. The thermal treatment process is expected to begin in late spring. The site's goal is to complete the treatment and have the soil put back into the excavation pit by August. The site submitted the plan for public comment in December 1996.

CAB's Environmental / Waste Management Committee will follow the progress of the remediation project. Officials at Rocky Flats have offered a tour of the remediation site. For any members of the public interested in taking a tour of the site or obtaining more information about the project, please contact the CAB office.

Would You Like to Become More Involved in Rocky Flats Issues?

We realize that many of you do not have the time to spend serving as a member of the Board. However, if you would like to devote a relatively small amount of time to learning about Rocky Flats issues, there is another option. CAB has several committees that study the issues and develop recommendations for the Board. There is so much happening at the site right now that these committees could really use some new members to provide their time, interest and perspectives to the committee process. Each committee meets once a month for two hours, and committee members will occasionally be asked to read materials prior to the meeting.

We feel that members of the community are entitled to the information we discuss at these meetings and would like to encourage anyone who is interested to join us in our efforts to ensure a safe and appropriate cleanup of Rocky Flats.

Please call the CAB office at (303) 420-7855 to find out which committee matches your interests.

Rocky Flats Area Needs Assessment Identifies Community Concerns

What does the community around Rocky Flats perceive its health and safety needs to be during the cleanup of the site? Is the community concerned about potential health effects? Does the community know what is going on at the site? Does the community feel heard? Do current Rocky Flats communication strategies meet the needs of the community?

In 1996, an exciting approach to find out the answers to these questions was begun. Beverly Lyne, a member of the Rocky Flats Citizens Advisory Board (CAB) and the chair of its Health Committee, petitioned the U.S. Department of Energy (DOE) to fund a Community Needs Assessment (RFCNA) before implementing a community based health study. DOE awarded a grant to the University of Colorado School of Nursing and the Jefferson County Department of Health and Environment to conduct this community needs assessment.

A wide representation of stakeholder groups was included in the design phase of the study. The target community included people living or working within a five-mile radius of the Rocky Flats boundary. Data was gathered through interviews, focus groups, compilation of demographic data, and birth and mortality statistics.

This study was unique in several respects. First, the community was asked about their health and safety concerns and needs before a program (or research study) was designed around assumed needs. Second, registered nurses were used to conduct the interviews and analyze data. Third, the study included the ongoing participation of a wide representation of stakeholder groups, and local and state health departments. Finally, CAB oversight was provided to ensure independent analysis.

The following eight themes evolved from this Community Needs Assessment:



Registered nurses and faculty from the University of Colorado School of Nursing review and analyze the needs assessment data.

- 1) A communication "black hole" exists from a lack of basic, understandable information;
- 2) Distrust of non-local government entities;
- 3) A lack of knowledge about an emergency plan in the event of an accidental release of radiation;
- 4) Concern over land development adjacent to the Rocky Flats site;
- 5) A need for impartial and appropriate environmental and health monitoring;
- 6) Concern for potential accidents, including acts of terrorism;
- 7) Feelings of vulnerability related to physical health, quality of life, property-value risk and overall stability of the community; and
- 8) Perceptions of the risk for disease and birth defects.

There have been several significant outcomes from the RFCNA. First, the Citizens Advisory Board has listened to the community's concerns and has incorporated some of the desired activities into its annual work plan. Specifically, the Board is soliciting an independent contractor to review and analyze Rocky Flats' current environmental monitoring program (see update on page 2). Second, CAB has also applied for a new grant to formally document the CNA process for use at other weapons complex sites and to begin implementing the recommendations of the Rocky Flats CNA. Third, CAB has initiated a multi-party dialogue on implementation of the RFCNA's findings. Finally, now that the RFCNA methodology has been developed and successfully implemented, it can be repeated in conjunction with future Rocky Flats decisions.

For more information about the Rocky Flats Community Needs Assessment or to request copies of the full report or Executive Summary, please contact the CAB office.

HELP US UPDATE OUR MAILING LIST

If you are interested in continuing to receive a quarterly newsletter from the Rocky Flats Citizens Advisory Board and we do not have your correct address – or if you know someone who may like to receive a copy of the newsletter, please let us know by filling out this insert and either fax or mail to:

Rocky Flats Citizens Advisory Board
9035 North Wadsworth Parkway, Suite 2250
Westminster, CO 80021
fax no. (303) 420-7579
[or you can call us at (303) 420-7855]

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THANK YOU!

DOE Pays for Results at Rocky Flats: Kaiser-Hill's Record in 1996

Kaiser-Hill completed its first full fiscal year as the integrating contractor at Rocky Flats on September 30, 1996. One way interested stakeholders can monitor the progress of cleanup efforts at the site is by tracking Kaiser-Hill's success in meeting the incentives tied to its contract. The results from last year are nearly complete.

Under Kaiser-Hill's contract, the company is reimbursed for its costs of doing the work at the site. Additionally, the Department of Energy has negotiated with Kaiser-Hill an amount of money that is available as profit to the contractor. Fifteen percent of this pool is guaranteed, providing Kaiser-Hill meets a minimally acceptable level of performance. The remaining 85% of Kaiser-Hill's potential profit is tied to the accomplishment of a series of activities, known as performance measures.

Prior to the start of each fiscal year, DOE and its contractor negotiate a set of performance measures. A detailed rating plan is developed for each measure that lays out the criteria upon which award, or fee, determinations will be made.

At the time this article was published, six of the 58 Fiscal Year (FY) 1996 performance measures had not been finalized. Of the remaining 52 measures, Kaiser-Hill was awarded full payment for 35, and partial payment for several others, amounting to 65% of the total available fee. Another \$1.4 million may yet be awarded for the outstanding measures, which would bring Kaiser-Hill's total award to approximately \$14 million, or 72% of the \$19.4 million that was available for the year.

There were two types of measures in FY96. Standard measures are those which Kaiser-Hill should have been able to meet fairly easily. Stretch measures were intended to be more challenging and difficult to meet, but brought with them higher incentive fees. Of the 22 standard measures, Kaiser Hill met all but two and earned \$3,235,500 out of the available \$3,385,500 (or 96% of the available fee). Kaiser-Hill received full award fees on 15 of the 36 stretch measures, as well as partial fee on several other stretch measures, earning them 58% of the available pool of just over \$16 million.

The performance measures were grouped into seven categories: special nuclear materials; site reconfiguration and closure; safety and health; social, administration and security; waste management; environmental restoration and risk reduction; and workforce performance.

One single category, special nuclear materials, accounted for 58% of all of the available award fees. Of the 24 measures in this category, Kaiser-Hill has been awarded 60% of the available fee. Full awards on the three outstanding measures could bring this total to 67%. Kaiser-Hill earned all available fees in the areas of waste management and environmental restoration and risk reduction. It neither received nor requested payment in the workforce performance category, although this accounted for only .01% of the total available fee pool.

FY1996 Kaiser-Hill Performance Measures Results*

- Received \$13 million of \$19.4 million available
- Of 58 total measures, 35 were completed in full, 17 were partially completed
- Received 100% available fee for Environmental Restoration / Risk Reduction and Waste Management
- Received 60% of available fee for Special Nuclear Materials
- Received 46% of available fee for Safety and Health
- Earned 96% of available fee for standard measures
- Earned 58% of available fee for stretch measures

*6 measures have not yet been finalized

In assessing the 1996 performance measures, the Department of Energy compiled some important lessons which were used in developing the FY97 performance measures. In setting 1997 performance measures, DOE felt it needed to incorporate cost restrictions along with the scope and schedule of the measures in order to prevent cost overruns. DOE also felt that it needed to be more demanding in terms of the work it rewards Kaiser-Hill for accomplishing. In looking back at the 1996 measures, DOE found that it ended up paying for routine work and needed to steer away from paper deliverables. Another lesson learned was that overall expectations were somewhat overlooked in the 1996 measures because they were developed in the lower organizational levels. In developing performance measures for 1997, DOE and Kaiser-Hill have used a top-down approach to ensure integration of the site's overall priorities.

The Citizens Advisory Board will continue to track Kaiser-Hill's progress in meeting its Fiscal Year 1997 performance measures. If you are interested in finding out more information about Rocky Flats' performance measures system, please contact Michael Holifield of the Department of Energy at (303) 966-3638.

Site-Specific Advisory Boards A R O U N D THE DOE WEAPONS COMPLEX

This Issue: Paducah Gaseous Diffusion Plant Site Specific Advisory Board

The Rocky Flats Citizens Advisory Board is one of several Site-Specific Advisory Boards (SSABs) that have been formed at former nuclear weapons production sites. In each issue of The Advisor, we spotlight the activities of one of these boards.

Located near the Ohio River, approximately 15 miles west of Paducah, Kentucky, the Paducah site began operations in 1952 to produce low assay enriched uranium for use as commercial nuclear reactor fuel. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation. Now out of the enrichment business, the Department of Energy (DOE) focuses its resources and efforts on environmental restoration of the Paducah site, and managing waste generated from those activities as well as past activities. The site is funded by DOE's Environmental Management Program. Its FY96 budget included \$35 million for environmental restoration, \$28.1 million for waste management, and \$27.4 million for enrichment facilities programs. Lockheed Martin is the contractor at Paducah, and employs around 2,275 people.

The Paducah Gaseous Diffusion Plant SSAB was formally chartered in August 1996. Currently there are eleven citizen Board members and four ex-officio members serving on the SSAB. Its members represent broad categories of citizens in the area such as public officials, plant employees, environmental activists, ministers, health care workers, union representatives, teachers, and site neighbors. The Board has three committees: Budget, Membership, and Policy. It recently hired a

professional facilitator to assist with its meetings.

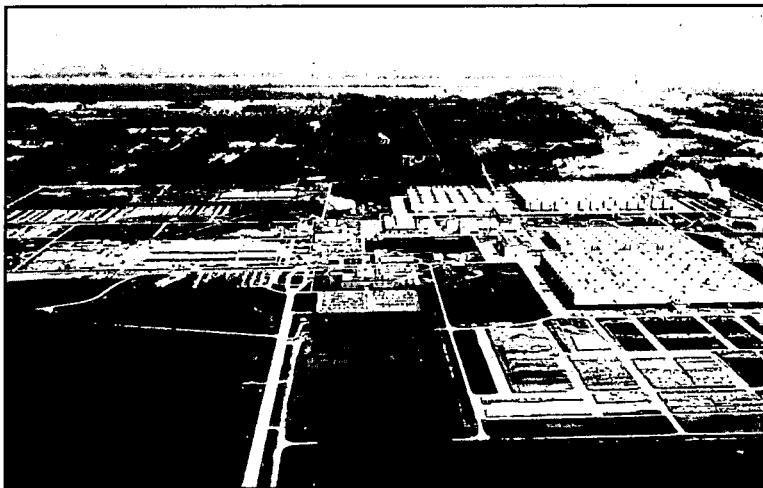
Since the Board is so new, it has spent its first few months on more internal issues. They plan to soon begin addressing more technical policy issues regarding the site. According to Mark Donham, Paducah SSAB co-chair, some of the major issues the Board will review and make recommendations on in

the near future include groundwater contamination, and the approximately 35,000 cylinders of depleted uranium located onsite.

"There was a huge plume of groundwater contamination that got offsite, contamination that includes radionuclides," Mark noted. In addition, "we have been told," says Mark, "that Paducah has the largest pile of contaminated scrap metal in the country." DOE officials have identified 206 areas of concern at the

Paducah site, some of which

include an old radioactive dump, the scrap metal site, and areas where chemicals have been either spilled or dumped. Site officials are currently working on a site management plan, including a separate plan for mixed waste. Also, DOE recently selected Paducah for a waste demonstration project to process radioactive solid waste through vitrification. Construction of the vitrification facility began in 1996. The Board will be studying all these issues and providing consensus recommendations in the near future.



The Paducah Gaseous Diffusion Plant, located near the Ohio River in western Kentucky.

CAB Approves New Board Members

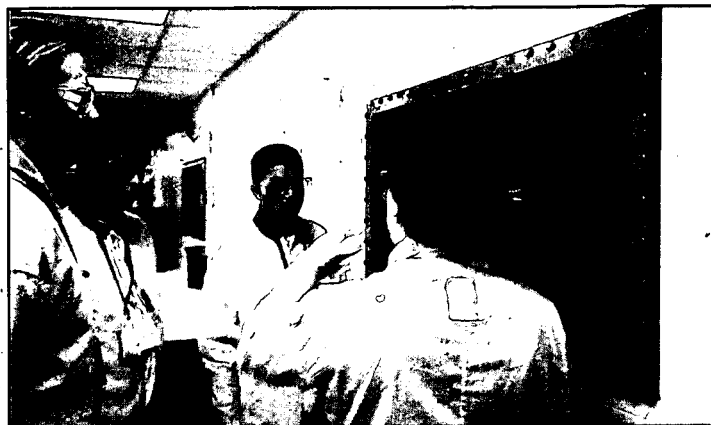
Please take a moment to acquaint yourself with CAB's five newest Board members. The addition of these members was approved by the Board at its November 7, 1996 and February 6, 1997 meetings.

Victor Holm. Victor is a geological engineer, with 25 years experience in mineral exploration and mine engineering, much of it in foreign countries. He worked for Freeport Indonesia as an engineer at the Grasberg Mine on the island of New Guinea. A member of the American Institute of Mineral Engineers, Victor has a degree in Geologic Engineering from the Colorado School of Mines. He lives in Lakewood. Victor was appointed as a technical representative for the Board.

Susan Barron. Susan currently serves as the temporary administrator for DOE's Rocky Flats Reading Room located at Front Range Community College, where she is also studying environmental sciences. Susan has an extensive background in paralegal work. Her interest is in representing members of the public and her community who rely on accurate information from the Rocky Flats Reading Room. Susan is a resident of Thornton.

Bob Kanick. Bob is a nuclear engineer who has worked on designs and system at nuclear power plants, including the Diablo Canyon Power Plant in California. He hopes to help the Board work toward a beneficial solution to the cleanup of Rocky Flats. Bob has a degree in nuclear engineering from Pennsylvania State University, and relocated to this area in 1994. He is a resident of Boulder.

James Kinsinger, Ph.D. A resident of Boulder since 1987, Jim is Vice President, Chief Science Officer for The Industrial Laboratories Company. He has earned a Ph.D. in



Two recently appointed Board members: Victor Holm (center) and Jim Kinsinger (right). Ken Korkia, CAB staff, is on left. Not pictured: Susan Barron, Bob Kanick, and Todd Saliman.

analytical chemistry, and has a strong background in physics. Jim has spent five years working at laboratories analyzing environmental samples under EPA contracts, and has also spent time managing laboratories. He has been appointed to represent the administrative/business community on the Board.

Todd Saliman. Todd is a state representative for District 11 in north Boulder, where he resides. Prior to being elected as a state representative, he was policy analyst for the Boulder County Commissioners, and represented Boulder County on the Rocky Flats Local Impacts Initiative. Todd's interest in serving on the Board is to represent his constituents as well as the State of Colorado. He has been appointed as a government representative to the CAB.

RFCAB Web Address: www.indra.com/rfcab
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The Advisor is published quarterly by the Rocky Flats Citizens Advisory Board (CAB). The Executive Editor is Tom Marshall. Please send your questions, suggestions and ideas to:

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CAB MISSION STATEMENT

The Rocky Flats Citizens Advisory Board, a non-partisan, broadly representative, independent advisory board with concerns related to Rocky Flats activities, is dedicated to providing informed recommendations and advice to the agencies (Department of Energy, Colorado Department of Public Health and Environment and the Environmental Protection Agency), government entities and other interested parties on policy and technical issues and decisions related to cleanup, waste management and associated activities. The Board is dedicated to public involvement, awareness and education on Rocky Flats issues.

Rocky Flats Public Meeting Calendar

March

6	Rocky Flats Citizens Advisory Board Meeting	6 - 9:30 p.m.	Westminster City Hall
10	CAB Site Wide Issues Committee	7 - 9 p.m.	Westminster City Hall
17	CAB National Issues Committee	6:30 - 8:30 p.m.	CAB office
18	CAB Plutonium and SNM Committee	7 - 9 p.m.	Westminster City Hall
20	CAB Environmental/Waste Management Committee	7 - 9 p.m.	Westminster City Hall

April

3	Rocky Flats Citizens Advisory Board Meeting	6 - 9:30 p.m.	Westminster City Hall
7	CAB Site Wide Issues Committee	7 - 9 p.m.	Westminster City Hall
15	CAB Plutonium and SNM Committee	7 - 9 p.m.	Westminster City Hall
17	CAB Environmental/Waste Management Committee	7 - 9 p.m.	Westminster City Hall
21	CAB National Issues Committee	6:30 - 8:30 p.m.	CAB office

May

1	Rocky Flats Citizens Advisory Board Meeting	6 - 9:30 p.m.	Westminster City Hall
5	CAB Site Wide Issues Committee	7 - 9 p.m.	Westminster City Hall
15	CAB Environmental/Waste Management Committee	7 - 9 p.m.	Westminster City Hall
19	CAB National Issues Committee	6:30 - 8:30 p.m.	CAB office
20	CAB Plutonium and SNM Committee	7 - 9 p.m.	Westminster City Hall

ALL MEETINGS ARE SUBJECT TO CHANGE, PLEASE CALL BEFORE YOU GO: (303) 420-7855

- CAB's Health Committee meets on an ad-hoc basis, please call for schedule
- Rocky Flats' public meeting schedule has not yet been determined, please call for updated information

Westminster City Hall: 4800 West 92nd Avenue, Westminster
CAB office: 9035 North Wadsworth Parkway, Suite 2250, Westminster

Rocky Flats Citizens Advisory Board

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